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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/919,643	07/31/2001	Diane D. Ilsley	10991398-1	5729

7590 10/16/2006

Agilent Technologies, Inc.  
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EXAMINER

LIU, SUE XU

ART UNIT PAPER NUMBER

1639

DATE MAILED: 10/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Advisory Action</b> <b>Before the Filing of an Appeal Brief</b>	Application No.	Applicant(s)	
	09/919,643	ILSLEY ET AL.	
	Examiner	Art Unit	
	Sue Liu	1639	

**--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

THE REPLY FILED 21 September 2006 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☐ The period for reply expires \_\_\_\_\_ months from the mailing date of the final rejection.  
b) ☒ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on \_\_\_\_\_. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

#### AMENDMENTS

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because  
(a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);  
(b) ☐ They raise the issue of new matter (see NOTE below);  
(c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or  
(d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: \_\_\_\_\_. (See 37 CFR 1.116 and 41.33(a)).


4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).  
5. ☐ Applicant's reply has overcome the following rejection(s): \_\_\_\_\_.  
6. ☐ Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).  
7. ☒ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☒ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.  
The status of the claim(s) is (or will be) as follows:  
Claim(s) allowed: \_\_\_\_\_.  
Claim(s) objected to: \_\_\_\_\_.  
Claim(s) rejected: 1, 2 and 4-28.  
Claim(s) withdrawn from consideration: 29-34.

#### AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).  
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing of good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).  
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

#### REQUEST FOR RECONSIDERATION/OTHER

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because:  
See Continuation Sheet.  
12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08) Paper No(s). \_\_\_\_\_.  
13. ☐ Other: \_\_\_\_\_.

  
MARK SHIBUYA, PH.D.  
PATENT EXAMINER

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**Continuation Sheet**

**Continuation of item 11:**

The following rejections are maintained for the reason of record:

- 1.) Claims 1-28 are rejected under **35 U.S.C. 102(b)** as being anticipated by Deeg et al (US 5,338,688; 08/16/1994).
- 2.) Claims 1, 2 and 9 are rejected under **35 U.S.C. 102(a)** as being anticipated by Caren et al (US 6,221,653; 04/24/2001).
- 3.) Claims 1, 2, 9 and 11 are rejected under **35 U.S.C. 102(e)** as being anticipated by Caren et al (US 6,797,469 B2; 09/28/2004; filed 03/26/2001).
- 4.) Claims 1, 2, 9 and 11 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 19-21 and 23 of U.S. Patent No. 6,797,469 B2.
- 5.) Claims 1, 2 and 9 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 3, 5-7, 9, 10, 12 and 23 of U.S. Patent No. 6,221,653 B1.
- 6.) Claims 1, 2, 9 and 11 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 5, 9, 11-13, 15 and 18 of U.S. Patent No. 6,656,740 B1.
- 7.) Claims 1, 2, 6, 7, and 8 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-5, 7 and 11-19 of U.S. Patent No. 6,323,043 B1.

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8.) Claims 1-4 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 3, 8, 12, 14, 15 and 18 of U.S. Patent No. 6,242,266 B1.

*Applicants argue because Claim 1 is amended to incorporate the element of Claim 3, and Claim 3 is not recited in the rejections 2-7 listed above, the rejections should be withdrawn. Applicants' arguments have been considered, but they are not persuasive for the following reasons (in addition to reasons of record):*

The amended Claim 1 has the element from Claim 3 in the preamble of the claim. In response to applicant's arguments, the recitation "wherein said quantity of fluid is no more than about 5ul" has not been given patentable weight because the recitation occurs in the preamble. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951).

The recitation "wherein said quantity of fluid is no more than about 5ul" can be construed as the purpose of the claimed method of depositing "no more than about 5ul" of a fluid, or it can be construed as the intended use of the inkjet head used in the claimed method. Accordingly, the recitation is not accorded any patentable weight. Thus, the rejections 2-7 listed above are maintained for the reason of record.

*Applicants argue that the Deeg reference does not teach "front loading", and thus the rejection 1 listed above should be withdrawn. Applicants specifically argue the following points:*

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*1.) Applicants state that "the Office equates the term "front loading" with "capillary action" ... " (Reply entered 9/21/06, p. 6, para 3), and applicants disagree.*

*2.) Applicants also argue that the instant application is drawn to a method of using an apparatus but not an apparatus. Thus, the apparatus taught by Deeg would not anticipate the claimed method, even though, Deeg's apparatus may be capable of being front loaded.*

To address applicants' first point, the instant specification recite that "front loading" protocol is to contact the orifice of the inkjet head with fluid under conditions sufficient for fluid to flow through the orifice and into the firing chamber of the head, where fluid flow is due, at least in part, to capillary forces. In addition, back pressure in the form of suction (i.e. negative pressure) may be applied to the firing chamber of the head to assist in the flow of fluid to into the orifice (see [0017] of the specification). Thus, by applicants' own disclosure in the instant specification, the action of "front loading" is through "capillary action".

To address applicants' second point, applicants are respectively invited to see MPEP 2112.02. "Under the principles of inherency, if a prior art device, in its normal and usual operation, would necessarily perform the method claimed, then the method claimed will be considered to be anticipated by the prior art device. When the prior art device is the same as a device described in the specification for carrying out the claimed method, it can be assumed the device will inherently perform the claimed process. In re King, 801 F.2d 1324, 231 USPQ 136 (Fed. Cir. 1986)". It is also noted that applicants stated on record that "the Deeg apparatus may be capable of being front loaded..." (emphasis provided by applicants) in the Reply entered 9/21/06, at p. 8, last para.

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In addition, applicant's argument regarding the configuration of the apparatus taught by the Deeg reference (p. 9, para 2) is also not persuasive. Contrary to applicants' interpretation of compartment 14 in the cited Figure as equivalent to the "firing chamber" of the instant claim, the compartments labeled 4 and 6 are interpreted as equivalent to the "firing chamber". The capillary action with or without aid of back pressure would allow fluid to flow through the orifice 5 into the chambers 4 or 6 of the reference.

Furthermore, the Deeg reference also teaches thermal inkjet aspirating (or suctioning) reagent solution (e.g. See Example 4, step e)), which would read on applying back pressure in the form of suction and front loading, as discussed in the previous Office action mailed 7/28/06, p. 5, para 1.

*Applicants argue that the Office has not demonstrated where Caren '266 teaches front loading a fluid containing a protein into an inkjet head, and thus the rejection 8 listed above should be withdrawn.*

As state in the previous Office action mailed 1/27/06, p. 9, "the '266 patent recites a method for fabricating an array of biopolymers on a substrate using a biopolymer fluid (would read on protein and enzyme; See Claim 1 and Column 6, lines 14-15)" (emphasis added). The term biopolymer is defined in the instant specification (col. 6, lines 14-15) as "peptides, or polynucleotides, as well as such compounds composed of or containing amino acid or nucleotide analogs", i.e. proteins.